Biotoxin Bulletin

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Program Participates in XHAB

St. Petersburg, Florida hosted the 10th International Conference on Harmful Algal Blooms (XHAB) during the week of October 21. There were approximately 900 attendees from 48 countries. Attendees from the Program included: John Ramsdell, Greg Doucette, Steve Morton, Fran VanDolah, Peter Moeller, Tricia Blair, Yasmine Bottein, Jamie Colman, Stacie Dover, Sheean Haley, Wes Jackson, Tod Leighfield, Jen Maucher, Tina Mikulski, Jeanine Miller, Laurinda Smith, Kate Schaefer, Ricky Woofter, and Mike Twiner.

XHAB Participants in Florida

CCEHBR Renovation Update

A predesign/charrette meeting for the Marine Biotoxins Program CCEHBR laboratory renovations was held on October 10 and 11. Emile Jammal of Lopatka, Murdock, Jammal & Associates Architectual/Engineering Firm and his team started the design charrette. A general discussion of the project and its goals took place, followed by intensive meetings with laboratory scientists to discuss design of specific laboratories. There will be a second visit of the design team for more detailed discussions of the submittal to guide preparation of 35% completion drawings. The Programming Study Report for the new CCEHBR renovations was just received. See back for preliminary 35% design.

Update on SFA Committees

John raised several of issues outside workgroup control to the SFA action plan for the branch chief's group.

Awards: The team met three times in November. Updated information on Cash-In-Your-Account award is under review.

Staff Interaction: The first social was held on the HML veranda on January 10 from 8:30am til 9:30am. Subsequent socials will be held the first Friday of every month.

Safety/Health: The front gate has been repaired but is not operational because of state budget problems. Establishing standard operating protocols for lab procedures and chemical handling is in progress. This is an issue that the branch as a whole needs to address. If you have protocols, please place them in the following folder *U:\Swap\MarineBiotoxins\procedures.*

Check out the upcoming January Manuscript Report!!!

SCPMN Attends SC²

On November 7th Heather Blankenstein and Kate Schaefer attended the 27th Annual South Carolina Science Council (SC²) Convention in Myrtle Beach. This was a three-day conference where teachers from throughout SC attended different sessions and learned new curriculum standards and education programs that they can utilize in their classrooms. Heather and Kate presented SCPMN to a group of science teachers and held a roundtable discussion afterwards to answer questions in more detail. Eleven teachers attended the presentation and provided glowing evaluations and expressed their enthusiasm for SCPMN. Next year's SC² conference will be held in Charleston at the North Charleston Coliseum, where SCPMN was asked to hold a longer session and provide the teachers with a field trip to actually do a plankton tow and then train them on phytoplankton identification at the conference.

NOS AA Visits the Program

Jean Snider, Peter Moeller and Jamie Hawkins

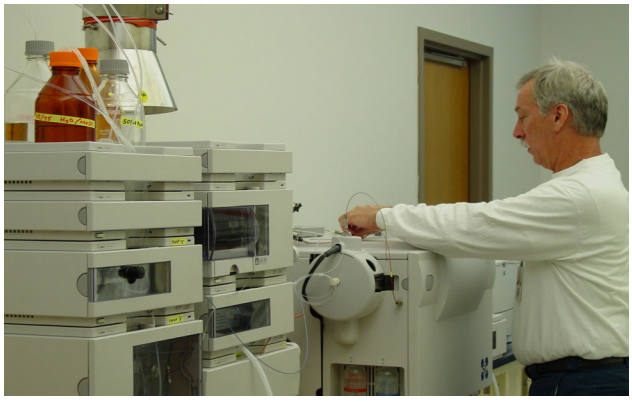
On October 4, NOS Assistant Administrator Jamie Hawkins and NCCOS Deputy Director Jean Snider visited the Marine Biotoxins Program. The purpose of their visit was to attend a briefing by John Ramsdell, Steve Morton, and Peter Moeller on the Program's progress on isolating the *Pfiesteria* toxin. Our guests toured both HML and CCEHBR to observe all aspects of the *Pfiesteria* project.

Toxic Donut-flagellate!!

Don't miss Starbucks coffee, juice and muffins at HML on the first Friday of the month at 8:30am

Preparative LC System

This system has the capability for both mass spectroscopy and photo diode-array detection with flow rates up to 50 ml/minute.



Robert Roberts prepares samples

Please direct all comments and suggestions to Marine.Biotoxins@noaa.gov

'At Sea!' Cruise Summary

South Carolina Phytoplankton Monitoring Network's staff aided Project Oceanica's At SEA! program in identifying local plankton species during this year's 2002 fall cruises aboard NOAA's R/V Ferrel. The purpose of these cruises is to actively engage local area high school and college students, as well as middle school teachers, in a series of data collection and sampling techniques. During the cruise from Charleston Harbor's Cooper River to offshore beyond the Harbor's jetties, students rotated through research stations that included such activities as a conductivity/ temperature/depth (CTD) cast, sediment grab, plankton tow and identification, and navigation and plotting techniques. With samples in hand students and teachers were asked to bring their data home for analysis. Each group was then asked to give a short community seminar to present their finding and conclusions. Included in the 89 participates where SCPMN volunteers from 8 local area high schools. During several of the cruises, SCPMN volunteers found potentially toxic species of *Pseudo-nitzschia* and *Dinophysis*. However, no species was found in high enough abundance to cause alarm. SCPMN staff look forward working with the new contacts.

Plankton identification & CTD cast

Web Site Update

The newly designed Program site can be found at **www.chbr.noaa.gov/CoastalResearch/**

The new SCPMN site can be found at **www.chbr.noaa.gov/CoastalResearch/SCPMN/**

Both sites have a dual search capability(entire web or just the lab site). The Program site now has FY02 Accomplishments posted. Comments on the site are greatly appreciated..

5th Toxic Shellfish Workshop

During the week of September 23, Laurinda Smith and Steve Morton attended the 5th Toxic Shellfish Workshop held at Boothbay Harbor, Maine. The host of the meeting was John Hurst, who is ending his 53rd year working for the Maine Department of Marine Resources. The meeting started with reports of toxic shellfish events during the 2001-2002 seasons from Canada, Maine, and Massachusetts. This year there has been little PSP toxins found in the US. However, during last year, clams and mussels were very toxic, up to 2600 ug STX-eq/kg. In Canada, shellfish harvesting was closed due to PSP, ASP, and DSP toxins.

One of the interesting displays was by Chris Sieracki, who developed the FlowCam. He has moved from Bigelow Laboratory to start a new company called Fluid Imaging Technologies. The latest FlowCam has increased optical capabilities and a completely submersible model is now available. Improvements on the FlowCam can be found at http://www.fluidimaging.com/.

3rd International Symposium on Harmful Algal Blooms and Control

Greg Doucette attended the 3rd International Symposium on Harmful Algal Blooms & Control (October 11-15) held at the National Fisheries Research & Development Institute in Busan, Korea. Korea depends heavily on cage-based aquaculture to supply a large portion of their fish for domestic consumption and export. Annual blooms of the dinoflagellate, *Cochlodinium polykrikoides* represent a major threat to the aquaculture industry and are presently thought to kill fish via high mucous production leading to suffocation. There is a large national effort to identify the most effective means for controlling these blooms. Currently, the primary means of controlling *C. polykrikoides* blooms is dispersing clay to flocculate the algal cells and promote sinking away from the fish cages. Several possible collaborative projects with Korean scientists were discussed and will be followed up on over the coming months.

R/V Longhorn Cruise

During 13-17 September, Steve Morton was invited on a research cruise aboard the R/V Longhorn to collect *Trichodesmium* in support of the algicide isolation project. The R/V Longhorn is the oceanographic vessel operated by the University of Texas Marine Science Institute. During the first leg of the cruise, a sea turtle that lost a flipper was released after two months of rehabilitation. Also during this first leg, a transect from near shore to the continental shelf break was run. At the shelf break, a large bloom of *Coscinodiscus* was observed, which turned the water a black color. The second leg of the cruise was conducted to collect *Trichodesmium* using a 1 m diameter, 202 µm mesh net. After a few preliminary tows, a large population of *Trichodesmium* was observed at 30 m. After many tows, approximately 250 g dry weight of *Trichodesmium* was collected.

R/V Longhorn

Dr. Tracy Villearal, University of Texas Marine Science Institute with a plankton net